

## Product datasheet for **RC227015**

### TPCN1 (NM\_001143819) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	TPCN1 (NM_001143819) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TPCN1
Synonyms:	TPC1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide  
Sequence:

>RC227015 representing NM\_001143819  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGGAGTCTTGCTACATTGCCAGGCTGGTCTTGAAGTCTAGGCTCAAGCAGTTCTCCACCTTGACCT  
 CCCAAAGCGCTGAGATTACAGAAGATGCCTCTAATGGAGGAGTTTCTGAGCAGCACCCCTGGCCAGTGG  
 CTTTGAAAGGGAGCTCAAACCAGAGACTATTTCAAGCCCTGGATATCATATCCTGAGGGCCACAGGAGAA  
 GAGAACATGGCTGTGAGTTGGATGACGACGTGCCGCTCATCCTGACCTTGGATGAGGGTGGCAGTGCCC  
 CACTGGCTCCCTCCAACGGCCTGGGCCAAGAAGAGCTACCTAGCAAAAATGGCGGCAGCTATGCCATCCA  
 CGACTCCCAGGCCCCAGTCTCAGCTCTGGGGTGGAGTTCCCCCTCCAGCCCCGCACACAACCTGGGAG  
 ATGAATTACCAAGAGGCAGCAATCTACCTCCAGGAAGGCGAGAACAACGACAAGTTCTTCAACCCACCCCA  
 AGGATGCCAAGGCGCTGGCGCCTACCTCTTGCACACAATCACCTCTTCTACCTGATGGAGCTGGCCAC  
 GGCCCTGCTGCTGCTGCTCTCCCTGTGCGAGGCCCGCCGTCCTCCGCACTCCGGCTTGGCATCTAT  
 GTCACAGCCACCTGGAGCTGTTTGGCCCTGATGGTGGTAGTGTGTTGAACTCTGCATGAAGTTACGCTGGC  
 TGGGCCTCCACACCTTATCCGGCACAAGCGGACCATGGTCAAGACCTCGGTGCTGGTGGTGCAGTTTGT  
 CGAGGCCATCGTGGTGTGGTACGGCAGATGTCCCATGTGCGGGTGACCCGAGCACTGCGCTGCATTTTC  
 CTGGTGGACTGTCCGATTGCGGTGGCGTCCGGCGCAACCTGCGGCAGATCTTCCAGTCCCTGCCGCCCT  
 TCATGGACATCCTCCTGCTGCTGCTGTTCTTATGATCATCTTGGCCATCCTCGGTTTCTACTTGTCTC  
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 ACAGCCAATTTCCAGATGTGATGATGCCCTCTACTCCCGGAACCCCTGGTCTGCGTCTTCTTCAATCG  
 TGTACCTCTCCATCGAGCTGATTTTCATCATGAACCTGCTTCTGGCTGTGGTGTTCGACACCTTCAATGA  
 CATTGAGAAACGCAAGTTCAAGTCTTGTCTACTGCACAAGCGAACCCTATCCAGCATGCCCTACCGCTG  
 CTCATCAGCCAGAGGAGGCTGCGGCATCTCCTACAGGCAGTTTGAAGGCCCTATGCGCTTCTACAAGC  
 CCCGGATGAGTGCCAGGGAGCGCTATCTTACCTTCAAGGCCCTGAATCAGAAACAACACCCCTGCTCAG  
 CCTAAAGGACTTTTACGATATCTACGAAGTTGCTGCTTGAAGTGAAGGCCAAGAAAAACAGAGAGCAC  
 TGGTTTGGATGAGCTTCCAGGACGGCGCTCCTCATCTTCAAAGGATTAATATCCTTGTGAAGTCCAAGG  
 CCTTCCAGTATTTCACTGTTGGTGGTGGCAGTCAACGGGGTCTGGATCCTCGTGGAGACATTTATGCT  
 GAAAGGTGGAACTTCTTCTCAAGCACGTGCCCTGGAGTTACCTCGTCTTCTAACTATCTATGGGGT  
 GAGCTGTTCTGAAGTTGCCGGCTGGCCCTGTGGAGTACTTGTCTTCCGGATGGAAGTTGTTTGACT  
 TCTCCGTGACAGTGTTCGCCTTCTGGGACTGCTGGCGCTGGCCCTCAACATGGAGCCCTTCTATTTTCAT  
 CGTGGTCTGCGCCCCCTCCAGCTGCTGAGGTTGTTTAAAGTTGAAGGAGCGCTACCGCAACGTGCTGGAC  
 ACCATGTTTCGAGCTGCTGCCCGGATGGCCAGCCTGGGCCTCACCTGCTCATCTTTTACTACTCCTTTCG  
 CCATCGTGGGCATGGAGTTCTTCTGCGGGATCGTCTTCCCAACTGCTGCAACACGAGTACAGTGGCAGA  
 TGCTACCGCTGGCGCAACCACACCGTGGGCAACAGGACCGTGGTGGAGGAAGGCTACTATTATCTCAAT  
 AATTTTGAACAATCCTCAACAGCTTTGTGACCCTGTTGAGCTCACAGTTGTCAACAACCTGGTACATCA  
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 AAGAACCAGGACTCGGAAGTTGATGGTGGCATACCCTTGAGAAGGAAATCTCCAAGAAGAGCTGGTTG  
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 GACAACCTCAGCAGAGTGCAGCCCCGCCGCCAGCAGCCCCAGGCAGCCGCCAGCGCTCCAGACCGT  
 TACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC227015 representing NM\_001143819  
 Red=Cloning site Green=Tags(s)

MESCZIAQAGLELLGSSSSPTLTSQSAEITEDASNGGVSEQHPWPSGFERELKPETISSPGYHILRATGE  
 ENMAVSLDDDVPLILTLDEGGSAPLAPSNGLQEEELPSKNGGSYAIHDSQAPSLSSGESSPSSPAHNWE  
 MNYQEAAYLQEGENNDKFFTHPKDAKALAAFLFAHNHLFYLMEALATALLLLLLLSEAPAVPALRLGIY  
 VHATLELFAIMVVVFELCMKLRWLGHTFIRHKRTMVKTSVLVQFVEAIVVLVRQMSHVRVTRALRCIF  
 LVDCRYCGGVRRLRQIFQSLPPFMDILLLLFFMIIFAILGFYLFSPNPSDPYFSTLENSIVSLFVLLT  
 TANFPDVMMPYSRNPWSCVFFIVYLSIELYFIMNLLLAVVFDTFNDIEKRKFKSLLLHKRTAIQHAYRL  
 LISQRRPAGISYRQFEGLMRFYKPRMSARERYLTFKALNQNTPLLCLKDFYDIYEVAALKWKAKKNREH  
 WFDELPRTALLIFKGINILVKSQAFQYFMYLVAVNGVWILVETFMLKGGNFFSKHVPWSYLVFLTIYGV  
 ELFLKVAGLGPVEYLSGWNLDFDSVTVFAFLGLLALALNMEPFYFIVVLRPLQLLRLFKLKERYRNVD  
 TMFELLPRMASLGLTLLIFYYSFAIVGMEFFCGIVFPNCCNTSTVADAYRWRNHTVGNRTVVEEGYYLNLN  
 NFDNILNSFVTLFELTVNWNWYIIMEGVTSTQSHWSRLYFMTFYIVTMVMTIIVAFILEAFVFRMNYSR  
 KNQDSEVDGGITLKEISKEELVAVLELYREARGASSDVTRLLETLSQMERYQQHSMVFLGRRSRTKSDL  
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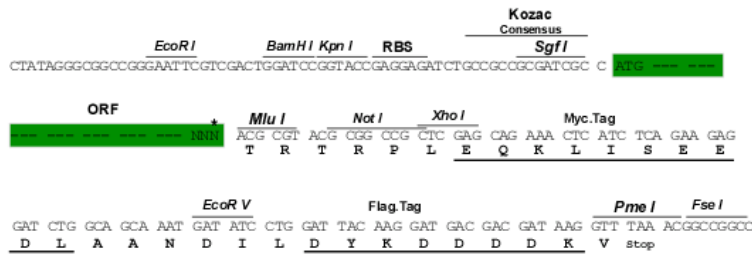
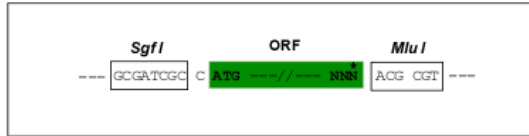
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8006\\_f10.zip](https://cdn.origene.com/chromatograms/mk8006_f10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:

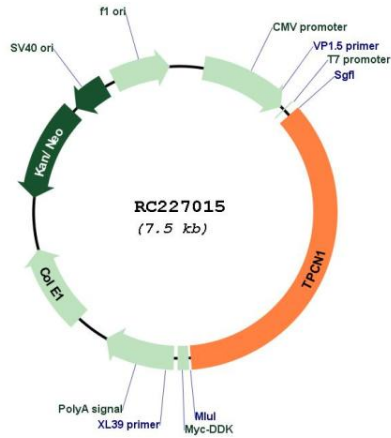


\* The last codon before the Stop codon of the ORF

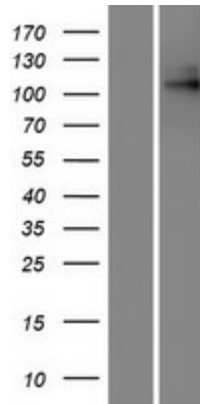
ACCN: NM\_001143819

<b>ORF Size:</b>	2664 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001143819.3</a>
<b>RefSeq ORF:</b>	2667 bp
<b>Locus ID:</b>	53373
<b>UniProt ID:</b>	<a href="#">Q9ULQ1</a>
<b>Cytogenetics:</b>	12q24.13
<b>Protein Families:</b>	Druggable Genome, Ion Channels: Other, Transmembrane
<b>MW:</b>	101.6 kDa
<b>Gene Summary:</b>	Voltage-gated Ca(2+) and Na+ channels have 4 homologous domains, each containing 6 transmembrane segments, S1 to S6. TPCN1 is similar to these channels, but it has only 2 domains containing S1 to S6 (Ishibashi et al., 2000 [PubMed 10753632]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC227015



Western blot validation of overexpression lysate (Cat# [LY428364]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227015 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).